

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of:

Guido KRUPP

Appln. No.: 10/526,487

Int'l Filing Date: September 2, 2003

For: Improved Methods for the Synthesis of  
Nucleic Acids

Art Unit: 1635

Examiner: To Be Assigned

Confirmation No.: 1084

Atty. Docket: 19006.005

**Information Disclosure Statement**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

The attention of the Examiner is invited to the references listed on the attached Form PTO-1449.

Copies of the foreign and non-patent references listed on pages 2-5 are submitted herewith.

Copies of the U.S. patents and published applications listed on page 1 of the attached Form PTO-1449 are not submitted herewith, in accordance with the Strategic Plan Final Rule, 69 Fed. Reg 56481-56547 (September 21, 2004), effective October 21, 2004.

Further, Applicants wish to bring to the attention of the Examiner, the following co-pending applications:

1. U.S. Application No. 09/937,519  
371 (c) Filing Date: March 5, 2002  
Entitled: Detection of Nucleic Acid Amplified Products;

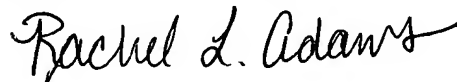
2. U.S. Application No. 10/516,007  
371 (c) Filing Date: June 8, 2005  
Entitled: Amplified of Ribonucleic Acids;
3. U.S. Application No. 60/712,820  
Filed: September 1, 2005  
Entitled: Universal Method for Selective Amplification of mRNAs

It is respectfully requested that the information above be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

#### **Certification and/or Fee**

Because this Information Disclosure Statement is being submitted prior to issuance of the first action on the merits of the above-captioned application, no certification or fee is required.

Respectfully submitted,



David R. Marsh (Reg. No. 41,408)  
Rachel L. Adams (Reg. No. 54,660)

Date: March 14, 2006

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FORM PTO-1449 <u>INFORMATION DISCLOSURE STATEMENT</u>				ATTY. DOCKET NO.		APPLICATION NO.	
				19006.005		10/526,487	
				APPLICANTS Guido KRUPP			
				INT'L FILING DATE		GROUP	
				September 2, 2003		1635	

U.S. PATENT DOCUMENTS					
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	REFERENCE PROVIDED*
	AA1	4,683,195	07/28/1987	Mullis <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AB1	4,683,202	07/28/1987	Mullis	not required, per 69 Fed. Reg. 56481
	AC1	5,130,238	07/14/1992	Malek <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AD1	5,256,555	10/26/1993	Milburn <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AE1	5,262,311	11/16/1993	Pardee <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AF1	5,407,800	04/18/1995	Gelfand <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AG1	5,459,037	10/17/1995	Sutcliffe <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AH1	5,514,545	05/07/1996	Eberwine	not required, per 69 Fed. Reg. 56481
	AI1	5,545,522	08/13/1996	Van Gelder <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AJ1	5,561,058	10/01/1996	Gelfand <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AK1	5,599,672	02/04/1997	Liang	not required, per 69 Fed. Reg. 56481
	AL1	5,665,547	09/09/1997	Pardee <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AM1	5,716,785	02/10/1998	Van Gelder <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AN1	5,780,273	07/14/1998	Burg	not required, per 69 Fed. Reg. 56481
	AO1	5,891,636	04/06/1999	Van Gelder <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AP1	5,932,451	08/03/1999	Wang <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AQ1	5,958,688	09/28/1999	Eberwine <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AR1	5,965,409	10/12/1999	Pardee <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AS1	5,972,607	10/26/1999	Kondo <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AT1	6,090,589	07/18/2000	Dimond <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AU1	6,132,997	10/17/2000	Shannon	not required, per 69 Fed. Reg. 56481
	AV1	6,291,170 B1	09/18/2001	Van Gelder <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AW1	US 6,361,949 B1	03/26/2002	Sommer	not required, per 69 Fed. Reg. 56481
	AX1	US 6,379,932 B1	04/30/2002	Arnold <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AY1	US 2003/0129624 A1	07/10/2003	Eastman <i>et al.</i>	not required, per 69 Fed. Reg. 56481
	AZ1	US 2005/0009027 A1	01/13/2005	Krupp <i>et al.</i>	not required, per 69 Fed. Reg. 56481

EXAMINER	DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

\*Copies of the listed references are either submitted herewith or were previously cited by or submitted to, the Office in a prior application. Pursuant to 37 C.F.R. § 1.97(d) and MPEP §609, the indicated reference may have been previously cited by or submitted to, the Office in a prior application, where the prior application is identified by its U.S. Application Number in this Information Disclosure Statement.

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FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	REFERENCE PROVIDED*	TRANSLATION	
	AA2	0 201 184 A2	12/17/1986	EPO	submitted herewith	Yes No	
	AB2	EP 0 592 626 B1	01/29/2003	EPO	submitted herewith	Yes No	
	AC2	EP 1 275 734 A1	01/15/2003	EPO	submitted herewith	Yes No	
	AD2	JP 2843675 B2	01/06/1999	Japan; nat'l phase of WO 93/18176 A1, submitted herewith	submitted herewith	X Yes No	
	AE2	WO 92/08800 A1	05/29/1992	PCT	submitted herewith	Yes No	
	AF2	WO 93/18176 A1	09/16/1993	PCT	submitted herewith	Yes No	
	AG2	WO 00/18966 A2	04/06/2000	PCT	submitted herewith	Yes No	
	AH2	WO 00/18966 A3	07/27/2000	PCT	submitted herewith	Yes No	
	AI2	WO 00/58505 A1	10/05/2000	PCT	submitted herewith	Yes No	
	AJ2	WO 00/75356 A1	12/14/2000	PCT	submitted herewith	Yes No	
	AK2	WO 01/71036 A2	09/27/2001	PCT	submitted herewith	Yes No	
	AL2	WO 01/071036 A3	10/24/2002	PCT	submitted herewith	Yes No	
	AM2	WO 03/020873 A2	03/13/2003	PCT	submitted herewith	(abstract only)	X Yes No
	AN2	WO 03/102232 A2	12/11/2003	PCT	submitted herewith	(abstract only)	X Yes No
OTHER (Including Author, Title, Date, Pertinent Pages, etc.)						REFERENCE PROVIDED*	
	AO2	Baugh <i>et al.</i> , "Quantitative analysis of mRNA amplification by <i>in vitro</i> transcription", <i>Nucleic Acids Research</i> , 29(5):1-9 (2001)				submitted herewith	
	AP2	Berger <i>et al.</i> , "Reverse Transcriptase and Its Associated Ribonuclease H: Interplay of Two Enzyme Activities Controls the Yield of Single-Stranded Complementary Deoxyribonucleic Acid", <i>Biochemistry</i> , 22(10):2365-2372 (1983)				submitted herewith	
	AQ2	Boularand <i>et al.</i> , "The Human Tryptophan Hydroxylase Gene: an Unusual Splicing Complexity in the 5'-Untranslated Region", <i>J. Biol. Chem.</i> , 270(8):3748-3756 (1995)				submitted herewith	
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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			REFERENCE PROVIDED*
AA3	Eberwine <i>et al.</i> , "Analysis of gene expression in single live neurons", <i>Proc. Natl. Acad. Sci. USA</i> , 89:3010-3014 (1992)		submitted herewith
AB3	Feinberg <i>et al.</i> , "A Technique for Radiolabeling DNA Restriction Endonuclease Fragments to High Specific Activity", <i>Analytical Biochemistry</i> , 132(1):6-13 (1983)		submitted herewith
AC3	Frohman <i>et al.</i> , "Rapid production of full-length cDNAs from rare transcripts: Amplification using a single gene-specific oligonucleotide primer", <i>Proc. Natl. Acad. Sci. USA</i> , 85:8998-9002 (1988)		submitted herewith
AD3	Hames <i>et al.</i> (Eds.), <u>Nucleic acid hybridisation: a practical approach</u> (Practical Approach Series), <i>IRL Press Ltd.</i> , pp. 179-202 (1985)		submitted herewith
AE3	Hanne <i>et al.</i> , "Fluorescence resonance energy transfer (FRET) to follow ribozyme reactions in real time", <i>Nucleosides &amp; Nucleotides</i> , 17(9-11):1835-1850 (1998)		submitted herewith
AF3	International Search Report, Application No. PCT/EP99/07127 (April 7, 2000)		submitted herewith
AG3	International Search Report, Application No. PCT/EP02/09348 (August 22, 2003)		submitted herewith
AH3	International Search Report, Application No. PCT/EP03/05579 (December 12, 2003)		submitted herewith
AI3	International Search Report, Application No. PCT/EP03/09756 (March 4, 2004)		submitted herewith
AJ3	Jenne <i>et al.</i> , "Real-Time Characterization of Ribozymes by Fluorescence Resonance Energy Transfer (FRET)", <i>Angew. Chem. Int. Ed.</i> , 38(9):1300-1303 (1999)		submitted herewith
AK3	Konarska <i>et al.</i> , "Replication of RNA by the DNA-Dependent RNA Polymerase of Phage T7", <i>Cell</i> , 57:423-431 (1989)		submitted herewith
AL3	Konarska <i>et al.</i> , "Structure of RNAs Replicated by the DNA-Dependent T7 RNA Polymerase", <i>Cell</i> , 63:609-618 (1990)		submitted herewith
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OTHER (Including Author, Title, Date, Pertinent Pages, etc.)			REFERENCE PROVIDED*
AA4	Krupp, "Stringent RNA quality control using the Agilent 2100 bioanalyzer", Application Note, Agilent Technologies (2005)		submitted herewith
AB4	Krupp, "Unusual promoter-independent transcription reactions with bacteriophage RNA polymerases", <i>Nucleic Acids Research</i> , 17(8):3023-3036 (1989)		submitted herewith
AC4	Kuhn <i>et al.</i> , "Specific interaction of the murine transcription termination factor TTF I with class-I RNA polymerases", <i>Nature</i> , 344:559-562 (1990)		submitted herewith
AD4	Liang <i>et al.</i> , "Differential Display of Eukaryotic Messenger RNA by Means of the Polymerase Chain Reaction", <i>Science</i> , 257:967-971 (1992)		submitted herewith
AE4	Lockhart <i>et al.</i> , "Expression monitoring by hybridization to high-density oligonucleotide arrays", <i>Nature Biotechnology</i> , 14:1675-1680 (1996)		submitted herewith
AF4	Löffler <i>et al.</i> , <i>Biochemie und Pathobiochemie</i> , pp. 150-154, Springer-Verlag (1998)		submitted herewith
AG4	Mathieu-Daudé <i>et al.</i> , "DNA rehybridization during PCR: the 'C <sub>0</sub> t effect' and its consequences", <i>Nucleic Acids Research</i> , 24(11):2080-2086 (1996)		submitted herewith
AH4	Milligan <i>et al.</i> , "Synthesis of Small RNAs Using T7 RNA Polymerase", <i>Methods in Enzymology</i> , Vol. 180, pp. 51-62, Academic Press, Inc. (1989)		submitted herewith
AI4	Mueller <i>et al.</i> , "RNA Integrity Number (RIN) - Standardization of RNA Quality Control", Application Note, Agilent Technologies (2004)		submitted herewith
AJ4	Pezo <i>et al.</i> , "Hypermutagenic in vitro transcription employing biased NTP pools and manganese cations", <i>Gene</i> , 186:67-72 (1997)		submitted herewith
AK4	Poirier <i>et al.</i> , "Screening differentially expressed cDNA clones obtained by differential display using amplified RNA", <i>Nucleic Acids Research</i> , 25(4):913-914 (1997)		submitted herewith
AL4	Puskás <i>et al.</i> , "RNA Amplification Results in Reproducible Microarray Data with Slight Ratio Bias", <i>BioTechniques</i> , 32(6):1330-1340 (2002)		submitted herewith
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	AA5	Richmond <i>et al.</i> , "Genome-wide expression profiling in <i>Escherichia coli</i> K-12", <i>Nucleic Acids Research</i> , 27(19):3821-3835 (1999)			submitted herewith
	AB5	Saiki <i>et al.</i> , "Enzymatic Amplification of $\beta$ -Globin Genomic Sequences and Restriction Site Analysis for Diagnosis of Sickle Cell Anemia", <i>Science</i> , 230:1350-1354 (1985)			submitted herewith
	AC5	Sargent, "Isolation of Differentially Expressed Genes", <u>Methods in Enzymology</u> , Vol. 152, pp. 423-432, Academic Press, Inc. (1987)			submitted herewith
	AD5	Sarkar <i>et al.</i> , "Access to a Messenger RNA Sequence or its Protein Product is Not Limited by Tissue or Species Specificity", <i>Science</i> , 244:331-334 (1989)			submitted herewith
	AE5	Stoflet <i>et al.</i> , "Genomic Amplification with Transcript Sequencing", <i>Science</i> , 239:491-494 (1988)			submitted herewith
	AF5	Van Gelder <i>et al.</i> , "Amplified RNA synthesised from limited quantities of heterogeneous cDNA", <i>Proc. Natl. Acad. Sci. USA</i> , 87:1663-1667 (1990)			submitted herewith
	AG5	Wyatt <i>et al.</i> , "Synthesis and Purification of Large Amounts of RNA Oligonucleotides", <i>BioTechniques</i> , 11(6):764-769 (1991)			submitted herewith
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